

FUJIWARA- U.S. Pat. Appln. No. 10/763,419
Attorney Docket No.: 008312-0307911

- AMENDMENT -

REMARKS

Reconsideration and the timely allowance of the pending claims, in view of the following remarks, are respectfully requested.

In the Office Action dated September 20, 2005, the Examiner rejected claims 1-3, 5-9, 12 and 14, under 35 U.S.C. §102(b), as allegedly being anticipated by Dibene '556 (U.S. Patent Pub. No. 2002/0021556); rejected claims 15-17 and 19-20, under 35 U.S.C. §102(b), as allegedly being anticipated by Chao '528 (U.S. Patent. No. 6,424,528); rejected claim 10, under 35 U.S.C. §103(a), as allegedly being unpatentable over Dibene '556; rejected claims 11 and 13, under 35 U.S.C. §103(a), as allegedly being unpatentable over Dibene '556 in view of Ikeda '701 (U.S. Patent Pub. No. 2001/0025701); rejected claims 18, under 35 U.S.C. §103(a), as allegedly being unpatentable over Chao '528 in view of Ikeda '701.

By this Amendment, Applicants have amended cancelled claims 1-20, without prejudice or disclaimer and have introduced new claims 21-28. Applicants submit that no new matter has been introduced. As such, claims 21-28 are currently presented for examination, of which claims 21, 23, 25, and 27 are independent.

Although the cancellation of claims 1-20 render all rejections moot, Applicants respectfully traverse the prior art rejections, under 35 U.S.C. §102(b), §103(a) relative to new claims 21-28, for the following reasons:

I. Prior Art Rejections Under 35 U.S.C. §102(b), §103(a).

As indicated above, new independent claim 21 now positively recites that the heat dissipating unit includes a plurality of heat dissipating plates which are formed independently to each other and each of the plates are arranged in the extending direction of each of the heat pipes of a heat transferring unit to separate from each other and each heat dissipating plate extends in a direction which crosses the extending direction of each heat pipe. In addition, claim 21 also positively recites that each heat

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dissipating plate contains a plurality of recesses which fit on the projecting portions of the heat conductive cover and are thermally connected thereto. These features are amply supported by the embodiments described in the Specification. (See, e.g., Specification, page 9, lines 6-10; page 10, lines 13 – page 11, line 10; FIG. 1).

Unlike the present invention, there is nothing in the references of record that teach the combination of features recited in claim 21. In particular, Dibene '556 discloses a heat transfer device 300 that includes a first thermally conductive chamber portion 306 (which the Examiner alleges corresponds to the claimed “heat transfer unit”), which is a vapor chamber formed by an upper portion 303 and a lower cap, lid or base 301, and a second thermally conductive chamber portion 307 (which the Examiner alleges corresponds to the claimed “heat dissipation unit”), formed as a plurality of hollow protrusions such as an array of pins and/or fins 305 extending away from and in fluid communication with the first thermally conductive chamber portion 306. (See, e.g., Dibene '556: par. [0046]; FIG. 3A).

With such a configuration, the Dibene '556 reference fails to teach a plurality of heat pipes in the heat transferring unit and a plurality of heat dissipating plates – much less, that each heat dissipating plate extends in a direction which crosses the extending direction of each heat pipe of the heat transferring unit, all of which are required by claim 21.

Regarding the heat dissipating plate recess element of claim 21, the Examiner acknowledged, relative to claim 10, that Dibene '556 does not disclose that each heat dissipating plate contains a plurality of recesses which fit on the projecting portions of the heat conductive cover. (See, Office Action, page 10). The Examiner then asserted that it would have been obvious “to incorporate a recess in the heat dissipating unit to fit on the projecting portion of heat conductive cover for the purpose of preventing lateral motion of the cover.” (See, Office Action, pages 10-11).

Applicants remind the Examiner that, pursuant to MPEP § 706.02(j), in order to establish a *prima facie* case of obviousness, there must be some suggestion or

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motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. With this said, there is absolutely nothing in the Dibene '556 reference that remotely teaches or suggests providing each heat dissipating plate with a plurality of recesses which fit on the projecting portions of the heat conductive cover, as required by claim 21.

That is, even if the array of pins 305 could ever be construed as plurality heat dissipating plates extending in a direction which crosses the extending direction of each heat pipe of the heat transferring unit (which is clearly not the case), the Dibene '556 reference teaches that the array of pins 305 are integrally connected to the conductive chamber portion 306, which the Examiner identified as the heat conductive cover. (See, Office Action, page 4, FIG. 6). There are no projecting portions on the conductive chamber portion 306 and no recesses on the pins 305 that fit on the projecting portions - and there is absolutely no hint or suggestion in the Dibene '556 reference that would lead artisans of ordinary skill to modify the Dibene '556 configuration to achieve the claimed structure. If anything, Dibene '556 teaches away from such a structure. At the very least, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case that would render these features obvious.

Applicants further submit that the Chao '528 reference fails to cure the deficiencies identified above relative to the Dibene '556 reference. As such, Chao '528 also fails to teach or suggest the combination of features recited by claim 21. In particular, Chao '528 discloses the use of thermally conductive fins 114 that are arranged in parallel to heat pipe 130. (See, e.g., Chao '528: col. 5, lines 14-20, col. 6, lines 52-60; FIGs. 1, 1A, 1B). Chao '528 further teaches that the fins 114 and base 102 are integrally formed together from a single piece of material. (See, e.g., Chao '528: col. 6, lines 24-28; FIG. 2).

As such, Chao '528 fails to teach or suggest that each heat dissipating plate extends in a direction which crosses the extending direction of each heat pipe of the heat transferring unit, as required by claim 21. Chao '528 also teaches away from

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providing each heat dissipating plate contains a plurality of recesses which fit on the projecting portions of the heat conductive cover, as also required by claim 21.

Applicants finally submit that the Ikeda '701 reference equally fails to teach or suggest these features for reasons already presented.

For at least these reasons, Applicants submit that none of the references teach the claimed combination of elements recited by amended claim 21. Accordingly, claim 21 is patentable over these references. Because independent claims 23, 25, and 27 recite features that are similar to the patentable features discussed above regarding claim 21, claims 23, 25, and 27 are also patentable for the same reasons presented above. And, because claims 22, 24, 26, and 28 depend from independent claims 21, 23, 25, and 27, respectively, claims 22, 24, 26, and 28 are patentable at least by virtue of dependency as well as for their additional recitations.

II. Conclusion.

All matters having been addressed and in view of the foregoing, Applicants respectfully request the entry of this Amendment, the Examiner's reconsideration of this application, and the immediate allowance of pending claims 21-28.

Applicants' Counsel remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter. Please charge any fees associated with the submission of this paper to Deposit Account Number 033975.

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The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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